CLAIMS

1. A low noise amplifier circuit comprising:

an attenuator for receiving a calibration signal and generating an attenuated calibration signal;

a low noise amplifier for amplifying the attenuated calibration signal in calibration mode or a functional signal in functional mode;

a comparator for comparing the calibration signal with the output of the low noise amplifier in calibration mode and generating a compensation signal indicating a deviation between the actual gain of the low noise amplifier and a desired gain; and

circuitry for adjusting the gain of the low noise amplifier responsive to the compensation signal.

2. The low noise amplifier circuit of claim 1 wherein the attenuator attenuates the calibration signal by -G dB, where G dB is the desired gain of the low noise amplifier.

3. The low noise amplifier circuit of claim 1 wherein said circuitry for adjusting the gain comprises circuitry for modifying a biasing current of the low noise amplifier circuit responsive to the compensation signal.

4. The low noise amplifier circuit of claim 3 wherein said circuitry for adjusting the gain comprises circuitry for generating the compensating current responsive to the voltage of the compensation signal.

5. The low noise amplifier circuit of claim 1 wherein said low noise amplifier has a first current path coupled to the output of the attenuator and a second current path coupled to the functional signal.

6. A method of controlling the gain of a low noise amplifier circuit comprising:

attenuating a calibration signal to produce an attenuated calibration signal;

amplifying the attenuated calibration signal with the low noise amplifier to produce a reference signal;

comparing the calibration signal with the reference signal and generating a compensation signal responsive to the comparison, indicating a deviation between the actual gain of the low noise amplifier and a desired gain; and

adjusting the gain of the low noise amplifier responsive to the compensation signal.

7. The method of claim 6 wherein the attenuating step comprises the step of attenuating the calibration signal by -G dB, where G dB is the desired gain of the low noise amplifier.

8. The method of claim 6 wherein the adjusting step comprises the step of modifying a biasing current of the low noise amplifier circuit responsive to the compensation signal.

9. The method of claim 8 wherein the adjusting step comprises the step of generating the biasing current responsive to the voltage of the compensation signal.

10. The method of claim 6 and further comprising the step of repeating the attenuating, amplifying, comparing and adjusting steps during operation of the low noise amplifier.